

# *Communicable Disease*

New York State Department of Health

## **Measles (rubeola, hard measles, red measles)**

### **What is measles?**

Measles is an acute, highly contagious viral disease capable of producing epidemics. Since the introduction of the measles vaccination in 1963, the number of measles cases has decreased to about 100 cases reported annually in the United States.

### **Who gets measles?**

Although measles is usually considered a childhood disease, it can be contracted at any age. The majority of cases are now imported from other countries or linked to imported cases. Unvaccinated individuals are 22 times more likely to get measles than are those who have two measles vaccines, usually given as measles, mumps and rubella vaccine (MMR).

### **How is measles spread?**

Measles is spread by direct contact with nasal or throat secretions of infected people or, less frequently, by airborne transmission. Measles is one of the most readily transmitted communicable diseases.

### **What are the symptoms of measles?**

Measles symptoms generally appear in two stages. In the first stage, the individual may have a runny nose, cough and a slight fever. The eyes may become reddened and sensitive to light while the fever consistently rises each day. The second stage begins on the third to seventh day and consists of a temperature of 103-105 degrees Fahrenheit and a red blotchy rash lasting four to seven days. The rash usually begins on the face and then spreads over the entire body. Koplik spots (little white spots) may also appear on the gums and inside of the cheeks.

### **How soon do symptoms appear?**

Symptoms usually appear in 10-12 days, although they may occur as early as seven or as late as 21 days after exposure.

### **When and for how long is a person able to spread measles?**

An individual is able to transmit measles from four days prior to and four days after rash onset.

### **Does past infection make a person immune?**

Yes. Permanent immunity is acquired after contracting the disease.

**What is the treatment for measles?**

There is no specific treatment for measles.

**What are the complications associated with measles?**

Pneumonia occurs in up to six percent of reported cases and accounts for 60 percent of deaths attributed to measles. Encephalitis (inflammation of the brain) may also occur. Other complications include middle ear infection, diarrhea and convulsions. Measles is more severe in infants and adults.

**How can measles be prevented?**

Anyone born on or after January 1, 1957, who does not have a history of physician-diagnosed measles or serologic confirmation of measles immunity, should receive two doses of MMR (measles, mumps, rubella) vaccine for maximum protection. The first dose should be given at 12-15 months of age. The second dose should be given at four to six years of age (school entry) at the same time as the DTaP and polio booster doses. MMR vaccine is recommended for all measles vaccine doses to provide increased protection against all three vaccine-preventable diseases: measles, mumps and rubella. Measles immunization is required of all children enrolled in schools and pre-kindergarten programs. Since August 1, 1990, college students have also been required to demonstrate immunity against measles.

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